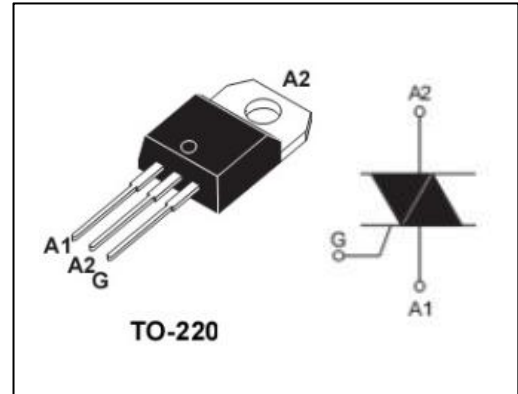


## isc Triac

## BTA312-600D

## DESCRIPTION

- With TO-220 packaging
- 3Q technology for improved noise immunity
- Direct interfacing with low power drivers and microcontroller
- High commutation capability with very sensitive gate
- High voltage capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



## APPLICATIONS

- high power motor control
- Solid state relays; heating and cooking appliances
- Switching applications

ABSOLUTE MAXIMUM RATINGS( $T_a=25^{\circ}\text{C}$ )

SYMBOL	PARAMETER		MIN	UNIT
$V_{\text{DRM}}$	Repetitive peak off-state voltage		600	V
$V_{\text{RRM}}$	Repetitive peak reverse voltage		600	V
$I_{\text{T(AV)}}$	Average on-state current		12	A
$I_{\text{TSM}}$	Surge non-repetitive on-state current	50HZ 60HZ	100 110	A
$P_{\text{G(AV)}}$	Average gate power dissipation ( over any 20 ms period )		0.5	W
$T_j$	Operating junction temperature		-40~150	$^{\circ}\text{C}$
$T_{\text{stg}}$	Storage temperature		-40~150	$^{\circ}\text{C}$

**ELECTRICAL CHARACTERISTICS (T<sub>c</sub>=25°C unless otherwise specified)**

SYMBOL	PARAMETER	CONDITIONS		MIN	MAX	UNIT
I <sub>RRM</sub>	Repetitive peak reverse current	V <sub>R</sub> =V <sub>RRM</sub> Rated; V <sub>D</sub> =V <sub>DRM</sub> Rated;	T <sub>j</sub> =125°C		0.5	mA
I <sub>DRM</sub>	Repetitive peak off-state current					
V <sub>TM</sub>	On-state voltage	I <sub>T</sub> =15A			1.6	V
I <sub>GT</sub>	Gate-trigger current	V <sub>D</sub> =12V; I <sub>T</sub> =0.1A;		I	5	mA
				II	5	
				III	5	
V <sub>GT</sub>	Gate-trigger voltage	V <sub>D</sub> =12V; I <sub>T</sub> =0.1A;			1.0	V

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